

# APPENDIX A

**Pierre CHAMBON**  
**CURRICULUM VITAE**

Born : February 7, 1931 - Mulhouse (France)

Marital status : Married - 3 children

Institutional address : Institut Clinique de la Souris (ICS) and  
Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC)  
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University degrees : M.D. - thesis 1958, Strasbourg  
Licence ès Sciences 1960, Strasbourg  
Agrégation (Medical Biochemistry), 1961.

Professional experience: 1956-1961 - Research Assistant, Institut de Chimie  
Biologique, Medical School, Strasbourg

1962-1966 - Associate Professor - same  
institution.

1966-1967 - Sabbatical year, sponsored by the  
International Union against Cancer, at Stanford  
University Medical School (Dept. Biochemistry /  
Prof. A. Kornberg).

1968-1991 - Professor of Biochemistry,  
Institut de Chimie Biologique, Faculté de  
Médecine, Strasbourg.

1992-1993 - Professor at the Institut  
Universitaire de France, Faculté de Médecine,  
Université Louis Pasteur, Strasbourg

mis à jour le 31/3/03

**November 1993 to August 2002** - Professor at the Collège de France - Paris

**September 2002** - Honorary Professor at the Collège de France, Paris and Professor emeritus at the Faculté de Médecine, Université Louis Pasteur, Strasbourg

## **Research Responsibilities and Administration :**

- Director of the Laboratoire de Génétique Moléculaire des Eucaryotes (LGME) of the CNRS (Centre National de la Recherche Scientifique) from May 1st, 1977 to August 2002
- Director of the Unité 184 de Biologie Moléculaire et de Génie Génétique of the INSERM (Institut National de la Santé et de la Recherche Médicale) from September 1st, 1978 to August 2002
- Director of the Institut de Génétique et de Biologie Moléculaire et Cellulaire (IGBMC), CNRS/ INSERM/ Université Louis Pasteur/ Collège de France, from September 15th, 1994 to August 2002. Director emeritus since September 1st, 2002.
- Chairman of the Conseil Scientifique du Programme National de la Génomique (1999-2002)
- Director of the Génopole Strasbourg Alsace-Lorraine, since 1999
- Director of the Institut Clinique de la Souris (ICS ; Centre de Ressources du CNRG-Génopole de Strasbourg), since June 2002

## **Other activities :**

### **Editorial Boards :**

- Genes and Development
- Cell
- Current Opinion in Endocrinology
- The Breast
- International Journal of Cancer
- Biochimie
- Molecular Medicine
- Journal of Clinical Investigation
- FASEB Journal
- Molecular Cell
- Genome Biology
- IUBMB Life

### **Scientific Boards**

- Founder and Member of the Board of Administrators of the Strasbourg School of Biotechnology (now European School of the Upper Rhine)
- Member of the Council of Scientific Advisers - ICGEB (Trieste)
- Member of the Eurolife Network

#### **Applied Research**

- Exonhit Scientific Advisory Board
- CareX : Member of the board
- Cytochroma : Scientific Advisory Board

### **Academy memberships and Honors :**

- Member of the European Molecular Biology Organization, since May 1975.
- Foreign Member of the National Academy of Sciences (USA), since April, 1985.
- Foreign Honorary Member of the American Academy of Arts and Science (USA), since May 1985.
- Member of the Académie des Sciences, Paris (Section : Cell Biology / Molecular Biology), since June 1985 (previously correspondant member since 1977).
- Foreign Member of the Royal Swedish Academy of Sciences, (Sweden) since March, 1987.
- Correspondant member of the Académie Royale des Sciences of Liège (Belgium), since August 1st, 1979.
- Foreign honorary member of the Académie Royale de Médecine of Belgium, since November 1987.
- Member of the Academia Europaea, since 1988.
- Honorary Member of the Chinese Society of Genetics (Taipei) since March 1989.
- Fellow of the American Association for the Advancement of Science , since February 1995.
- Fellow of the American Academy of Microbiology, since August 1992.
- Fellow of the New York Academy of Sciences, since October 1996
- Honorary Member of the German Society for Cell Biology, November 2001.

#### **Honors**

- Dr. Honoris Causa, University of Liège, Belgium, June 1985.
- Honorary Doctor of Philosophy, Sapporo Medical University - Japan, October 1999.
- Dr. Honoris Causa ès Sciences, University of Lausanne, Switzerland, October 2001.
- Dr. Honoris Causa, Universidad Autonoma de Nuevo Leon, Monterrey Mexico, December 2002.

#### **Other Honors**

- Commandeur in l'Ordre National de la Légion d'Honneur - France
- Commandeur in l'Ordre National du Mérite - France

#### **Scientific Prizes**

- "Prix Rosen" in Cancer Research, awarded by the Fondation pour la Recherche Médicale, Paris, 1976.
- Gold Medal of the Centre National de la Recherche Scientifique (CNRS), Paris, 1979.
- Louis and Bert Freeman Foundation Prize for Research in Biochemistry of the New York Academy of Science, 1981.
- Richard Lounsbery Prize of the National Academy of Sciences (USA) and the Académie des Sciences (France), 1982.
- Charles Oberling Prize in Cancer Research, Paris, 1986.
- The Harvey Price of Science and Technology, awarded by TECHNION (Israel Institute of Technology), Haifa, 1987.
- Prix Griffuel of the Association pour la Recherche sur le Cancer, Paris, 1987.
- Prix Henry et Mary-Jane Mitjavile of the Académie Nationale de Médecine, Paris, 1987.
- King Fayçal International Prize in Science, Riyadh, 1988.
- Sir Hans Krebs Medal, Federation of European Biochemical Societies, 1990.
- Prix Roussel, Paris, 1990.
- Prix Louis Jeantet de Médecine 1991, Genève, 1991
- Grand Prix of the French Foundation for Medical Research, Paris, 1996
- Robert A. Welch Award in Chemistry, Houston, 1998
- 1999 Louisa Gross Horwitz Prize (Columbia University)
- 1999 AFRT Prize (Association Française pour la Recherche Thérapeutique), Paris, France.
- 2003 March of Dimes Prize in Developmental Biology, Seattle, 2003
- 2003 Alfred P. Sloan Jr. Prize, General Motors Cancer Research Foundation, Washington, 2003.

#### **Lectureships**

- Dunham Lecturer, Harvard University Medical School, April 20-30, 1983.
- Gregory Pincus Memorial Lecture, The Laurentian Hormone Conference, Mont-Tremblant, Canada, August 30 - September 2, 1983.
- Charles B. Smith's Visiting Professorship, Memorial Sloan-Kettering Cancer Center, New York, USA, February 20-25, 1984.
- 1st J.F. Volker Visiting Professorship, University of Alabama, Schools of Medicine and Dentistry, Birmingham, USA, September 15-18, 1985.
- Triton Lecturer at the International Breast Cancer Research Conference of the International Association for Breast Cancer Research, Miami, USA, March 2-4, 1987.
- Steenbock Lecturer in Life Sciences, University of Wisconsin/Madison College of Agricultural and Life Sciences, Madison, USA, May 21-22, 1987.
- 1987 Guest Lecturer of the Japan Foundation for Promotion of Cancer Research, National Cancer Institute, Tokyo and Osaka, Japan, September 12-23, 1987.
- 7th Smith, Kline and French Lecturer, Temple University, Medical School, Philadelphia, USA, December 8-9, 1987.
- Annual Abbott Lecture in Molecular Biology, University of Illinois, College of Medicine, Chicago, USA, May 26-27, 1988
- The Jacques Monod Lecture at the XVth International Congress of Genetics, Toronto, Canada, August 1988.
- First Karlson Lecture, University of Marburg, Germany, October 12, 1988.
- 1988 NOVO Lecture, Danish Biochemical Society, Copenhagen, Denmark, December 14, 1988.
- XIV Lorenzini Annual Lecture, Fondazione G. Lorenzini, Milan, Italy, April 20, 1989.
- Herman Beerman Lecture, Society for Investigative Dermatology, Washington, USA, April 29, 1989.
- Susan Swerling Lecture, Dana Farber Cancer Institute, Boston, USA, May 2, 1989.
- The Samuel Roberts Noble Memorial Address, 2nd Internat. Conf. on "Transglutaminases and Protein Cross-Linking Reactions", Cannes, France, June 26, 1990
- Sir Hans Krebs Lecture "Nuclear Receptors as Inducible Transcriptional Enhancer Factors", 20th FEBS Meeting, Budapest, Hungary, August 19, 1990.
- The Markey Lectures, Harvard University Medical School, Boston, USA, October 31 and November 1, 1990.

- The Merck Frosst Canada lecture series: Frontiers in Molecular Biology "Retinoid receptors and binding proteins in development", Montreal, Canada, June 17, 1992.
- The Merck US Lecture "Cancer Genes: Retinoid Receptors in Development and Acute Promyelocytic Leukemia", Stanford University School of Medicine, Stanford, USA, September 21, 1992.
- Tufts University, School of Medicine "1993 Earl P. Charlton Lecture", Boston, USA, November 8, 1993.
- Karolinska Research Lectures at Nobel Forum, Karolinska Institutet, Stockholm, Sweden, April 20, 1995
- UCSD/American Heart Association - Bugher Foundation - Center for Molecular Biology 1994-1995 Lecture Series, San Diego, USA May 30, 1995
- The 1995 Kligman Lecture - Skin Pharmacology Society Annual Meeting. Vienna, Austria, November 2nd, 1995.
- The 11th Hans L. Falk Memorial Lecture - National Institute of Health, Research Triangle Park, N.C., USA, December 7, 1995.
- Imperial Cancer Research Fund "Special Seminars", London, UK, May 16th, 1996.
- Saitama Medical School, Dept. of Biochemistry, Prof. M. Muramatsu. Honorary Lecture - Saitama, Japan, October 24, 1996.
- Howard Hughes Honorary Lecture, Dept. of Molecular Biophysics & Biochemistry, Yale University, New-Haven, USA, October 13, 1997.
- Zeneca plenary Lecture - EMBL Transcription meeting, Heidelberg, Germany, August 22-26, 1998
- Boehringer Ingelheim Lecture, Institut für Physiologische Chemie & Pathochemie, Johannes Gutenberg Universität, Mainz, Germany, February 12, 1998
- Jean Brachet Memorial Lecture, 10th International Conferences of the International Society of differentiation, Houston, USA, October 3-7, 1998
- The "1998 Welch Award Lecture", Welch Conference on "New Biochemistry, macromolecular machines", Houston, USA, October 26-27, 1998
- Baylor College of Medicine, Distinguished Guest Lecture, Houston, USA, October 28, 1998
- Howard Hughes Medical Institute, Keynote speaker, Chevy Chase, USA, March 21-24, 1999
- EMBO Workshop on Structure and Function of Nuclear Receptors, co-organizer, Villefranche-sur-Mer (Nice), France, May 25-27, 1999. Plenary Lecture
- Forefront Meeting of the International Society of Nephrology, "News in Aldosterone Action", Paris-Chantilly, France, August 15-18 1999. Keynote Speaker

- 6th International congress of Hormones & Cancer - Jerusalem, Israel, September 5-9 1999. Plenary Lecture
- ERRG (European Retinoid Research Group) RETINOIDS'99, organizer, Bischenberg Congress Center (Strasbourg), France, September 26-30, 1999. Plenary Lecture
- 6th IUBMB Conference "Life Science for the next millennium" - Seoul, Korea, October 10-14, 1999. Plenary Lecture
- Journées Dermatologiques de Paris - Paris, France, December 1-4, 1999. Plenary Lecture
- Horwitz Prize Lecture, Columbia University, College of Physicians and Surgeons, New York, USA, October 23, 2000.
- 11th International Congress of Endocrinology, ICE2000. Sydney, Australia, November 1st, 2000. The Harrison Memorial Lecture: Dissection of the retinoid signalling pathway.
- Paul Basset Memorial Meeting "Matrix metalloproteinases in physiological and pathological processes", organizing committee, IGBMC, Illkirch, France, November 24-25, 2000. Plenary lecture
- Meyenburg Stiftung Lecture (Joint International Journal of Cancer), Deutsches Krebsforschungszentrum, Heidelberg, Germany, January 30, 2001.
- EMBO Workshop on Nuclear Receptor Structure and Function, Erice Italy, May 12-15, 2001, Plenary Lecture.
- First Joint French-German Congress on Cell Biology. Strasbourg, November 7-9, 2001. Plenary Lecture and Honorary Membership of the Deutsche Gesellschaft für Zellbiologie,
- Inaugural CNIO Symposium on « Basic and translational cancer research », Madrid, Espagne, February 6-9, 2002. Plenary Lecture.
- First International Nuclear Receptor Meeting, Kyoto, Japan, February 28-March 3, 2002. Keynote speaker
- Opening Symposium Saitama Medical School, Saitama, Japan, April 10-12, 2002. Plenary Lecture
- Keystone Symposium "Nuclear Receptor Superfamily", Snowbird, USA, April 13-19, 2002. Co-organizer and Plenary Lecture
- First International Congress on transthyretin in health & disease, Strasbourg, France, April 22-25, 2002. Plenary lecture
- Congrès Annuel de Recherche Dermatologique, Strasbourg, France, May 23-25, 2002. Plenary Lecture.
- FASEB Summer Conference on Retinoids, Tucson (USA), June 22-27, 2002, James Olson Special Lecture
- 20<sup>th</sup> World Congress of Dermatology, Paris (France), July 1-5, 2002. Plenary Lecture



- Inaugural Symposium of the Center for Genomic Regulation (CRG) « Genes, Cells and Disease », Barcelone (Espagne), October 25, 2002. Plenary lecture
- -International Centre for Genetic Engineering and Biotechnology, New Delhi, Inde, November 12, 2002. Special lecture
- 13th Symposium on Retinoids, Tokyo (Japon), November 14-15, 2002. Plenary lecture
- XXVII Annual Meeting of the Mexican Human Genetic Society, Veracruz (Mexique), November 23, 2002. Closing Lecture.
- Strasbourg ULP - Weizmann Symposium, January 13-15, 2003. Plenary lecture
- 2003 Miami Nature Biotechnology Winter Symposium. 50 years on: from the double helix to molecular medicine, Miami (USA), Feb. 2-5, 2003. The Feodor Lynen Lecture.
- 2003 March of Dimes Lecture, Seattle (USA), May 5, 2003.
- 50th anniversary symposium "Frontier Research in IMCB: its relation to the world scene", Tokyo (Japan), May 9, 2003. Plenary talk.
- Annual Meeting of the 76th Japan Endocrine Society Meeting, Yokohama (Japan), May 10, 2003. Special lecture.
- EMBO Conference "Biology of Nuclear Receptors" (Organiser) Villefranche-sur-Mer (France), June 4-7, 2003.
- General Motors Cancer Research Foundation Scientific Conference & Awards Ceremony, Washington, D.C. (USA), June 10-11, 2003. Laureate Lecture.
- Special FEBS 2003 Meeting "on Signal Transduction", Brussels (Belgium), July 3-8, 2003. Sir Hans Krebs Lecture.

## Publications (almost 700)

### Major Publications.

1. P. Walter, S. Green, G. Greene, A. Krust, J.M. Bornert, J.M. Jeltsch, A. Staub, E. Jensen, G. Scarce, M. Waterfield, and P. Chambon: Cloning of the human estrogen receptor cDNA. *Proc. Natl. Acad. Sci. USA* (1985) **82**, 7889-7893.
2. S. Green, P. Walter, V. Kumar, A. Krust, J.M. Bornert, P. Argos and P. Chambon: The human oestrogen cDNA: sequence, expression and homology to v-erbA. *Nature* (1986) **320**, 134-139.
3. S. Kato, H. Endoh, T. Masuhiro, T. Kitamoto, S. Uchiyama, T. Sasaki, S. Masuhige, Y. Gotoh, E. Nishida, H. Kawashima, D. Metzger, and P. Chambon: Activation of the estrogen receptor through phosphorylation by mitogen-activated protein kinase. *Science* (1995) **270**, 1491-1494.
4. S. Green, and P. Chambon: Oestradiol induction of a glucocorticoid-responsive gene by a chimeric receptor. *Nature* (1987) **325**, 75-78.
5. M. Petkovich, N.J. Brand, A. Krust and P. Chambon: A human retinoic acid receptor which belongs to the family of nuclear receptors. *Nature* (1987) **330**, 444-450.
6. P. Chambon: A decade of molecular biology of retinoic acid receptors. *FASEB J.* (1996) **10**, 940-954.
7. M. Leid, P. Kastner, R. Lyons, H. Nakshatri, M. Saunders, T. Zacharewski, J.Y. Chen, A. Staub, J.M. Garnier, S. Mader and P. Chambon: Purification, cloning and RXR identity of the HeLa cell factor with which RAR or TR heterodimerizes to bind target sequences efficiently. *Cell* (1992) **68**, 377-395.
8. P. Kastner, M. Mark and P. Chambon: Nonsteroid nuclear receptors: what are genetic studies telling us about their role in real life? *Cell* (1995) **83**, 859-869.
9. B. Mascrez, M. Mark, A. Dierich, N. Ghyselinck, P. Kastner, and P. Chambon : The RXR $\alpha$  ligand-dependent activation function 2 (AF-2) is important for mouse development. *Development* (1998) **125**, 4691-4707.
10. W. Bourguet, M. Ruff, P. Chambon, H. Gronemeyer, and D. Moras: Crystal structure of the ligand binding domain of the human receptor RXR $\alpha$ . *Nature* (1995) **375**, 377-382.
11. J. P. Renaud, N. Rochel, M. Ruff, V. Vivat, P. Chambon, H. Gronemeyer and D. Moras: Crystal structure of the RAR $\alpha$  ligand-binding domain bound to all-trans retinoic acid. *Nature* (1995) **378**, 681-689.
12. J.M. Wurtz, W. Bourguet, J.P. Renaud, V. Vivat, P. Chambon, D. Moras, and H. Gronemeyer : A canonical structure for the ligand-binding domain of nuclear receptors. *Nature Struct. Biology* (1996) **3**, 87-94.
13. R. Taneja, C. Rochette-Egly, J.L. Plassat, L.Penna, M.P. Gaub, and P. Chambon : Phosphorylation of activation functions AF-1 and AF-2 of RAR $\alpha$  and RAR $\beta$  is indispensable for differentiation of F9 cells upon retinoic acid and cAMP treatment. *EMBO J.*, (1997) **16**, 6452-6565.
14. W. Krezel, N. Ghyselinck, T. Abdel-Samad, V. Dupé, P. Kastner, E. Borrelli, and P. Chambon : Impaired locomotion and dopamine signaling in retinoid receptor mutant mice. *Science* (1998) **279**, 863-867.
15. K. Niederreither, V. Subbavarayan, P. Dollé, and P. Chambon : Embryonic retinoic acid synthesis is essential for early mouse post-implantation development. *Nature Genetics* (1999) **21**, 444-448.
16. R. Feil, J. Brocard, B. Mascrez, M. LeMeur, D. Metzger, and P. Chambon: Ligand-activated site-specific recombination in mice. *Proc. Natl. Acad. Sci.* (1996) **93**, 10887-10890.
17. M. Li, A.K. Indra, X. Warot, J. Brocard, N. Messaddeq, S. Kato, D. Metzger and P. Chambon. Skin abnormalities generated by temporally-controlled RXR $\alpha$  mutations in adult mouse epidermis. *Nature* (2000) **407**, 633-636.
18. S. Abu-Abed, P. Dollé, D. Metzger, B. Beckett, P. Chambon, and M. Petkovich : The retinoic acid-metabolizing enzyme, CYP26A1, is essential for

- normal hindbrain patterning, vertebral identity and development of posterior structures. *Gene Develop.*, (2001) **15**, 226-240.
19. T. Imai, M. Jiang, P. Chambon and D. Metzger : Impaired adipogenesis and lipolysis in the mouse upon selective ablation of the retinoid X receptor  $\alpha$  mediated by a tamoxifen-inducible chimeric Cre recombinase (Cre-ER<sup>T2</sup>) in adipocytes. *Proc. Natl. Acad. Sci.* (2001) **98**, 224-228.
  20. D. Metzger, A. Indra, M. Li, B. Chapellier, C. Calleja, N.B. Ghyselinck and P. Chambon: Targeted conditional somatic mutagenesis in the mouse: temporally-controlled knock out of retinoid receptors in epidermal keratinocytes. *Methods in Enzymology* (2002) in press.

## Major Review Articles.

### STRUCTURAL AND FUNCTIONAL PROPERTIES OF THREE MAMMALIAN NUCLEAR DNA-DEPENDENT RNA POLYMERASES.

5th Karolinska Symposium, Stockholm, Sweden

*Acta Endocrinol.* Vol. **168**, 1972, pp. 222-246.

(in collaboration with: F. Gissinger, C. Kédinger, J.L. Mandel, M. Meilhac and P. Nuret)

### EUKARYOTIC RNA POLYMERASES.

"The Enzymes", Vol. **X**, 1974, pp. 261-331.

Ed. P.D. Boyer, Academic Press, New York.

### ANIMAL NUCLEAR DNA-DEPENDENT RNA POLYMERASES.

"The Cell Nucleus", Vol. **III**, 1974, pp. 269-308.

Ed. H. Busch, Academic Press, New York.

### EUKARYOTIC RNA POLYMERASES.

"Annual Review of Biochemistry", Vol. **44**, 1975, pp. 613-633.

Eds. Ann. Rev. Inc., Palo Alto, California, USA.

### CHROMATIN 1977 : STRUCTURE AND FUNCTION.

Molecular Biology of eukaryotic genome is coming of age :

Summary of the 42nd Cold Spring Harbor Symp. on Quantitative Biology. CSHSQB, Vol. **42**, 1977, pp. 1209-1234.

Ed. Cold Spring Harbor Laboratory, New York.

### THE OVALBUMIN GENE : AN AMAZING GENE IN 8 PIECES.

*Trends in Biochemical Sciences*, Vol. **3**, 1978, pp. 244-247.

(in collaboration with: P. Kourilsky)

### STRUCTURE OF TRANSCRIBING CHROMATIN.

"Progress in Nucleic Acids Res. and Molecular Biology", Vol. **24**, 1980, pp. 1-55. Ed. W. Cohn, Academic Press, New-York.

(in collaboration with D. Mathis and P. Oudet)

### ORGANIZATION AND EXPRESSION OF EUKARYOTIC PROTEIN-CODING NUCLEAR SPLIT GENES.

"Annual Review of Biochemistry", Vol. **50**, 1981, pp. 349-383.

Eds. Ann. Rev. Inc., Palo Alto, California, USA.

### SPLIT GENES.

"Scientific American", Vol. **244**, 1981, pp 48-59.

### PROMOTER ELEMENTS OF GENES CODING FOR PROTEINS AND MODULATION OF TRANSCRIPTION BY OESTROGENS AND PROGESTERONE.

"Recent Progress in Hormone Research - Proceedings of the Laurentian

Hormone Conference", Vol. 40 (Ed. R.O. Greep) 1984, Acad. Press, pp. 1-42

THE SV40 EARLY PROMOTER.

"Molecular Aspects of the Papovavirus", Y. Aloni Ed., Martinus Nijhoff, Pays-Bas, 1987, pp. 53-83.

(in collaboration with M. Zenke et A. Wildeman)

A SUPERFAMILY OF POTENTIALLY ONCOGENIC HORMONE RECEPTORS.

Nature, 1986 324, 615-617.

(in collaboration with S. Green)

STRUCTURE AND FUNCTION OF THE OESTROGEN RECEPTOR AND OTHER MEMBERS OF THE NUCLEAR RECEPTOR FAMILY.

Steroid Receptors and Disorders : Cancer, Bone and Circulatory Disorders, Sheridan, Blum, Trachtenberg, Eds., Marcel Dekker Inc., New York, (1988), pp. 153-189 (in collaboration with H. Gronemeyer, S. Green, V. Kumar and J.M. Jeltsch).

NUCLEAR RECEPTORS ENHANCE OUR UNDERSTANDING OF TRANSCRIPTION REGULATION.

Trends in Genetics (1988) 4, 309-314

(in collaboration with S. Green).

THE OESTROGEN RECEPTOR : FROM PERCEPTION TO MECHANISM

Nuclear Hormone Receptors, Malcom Parker (ed), Academic Press, (1991), 15-33.

(in collaboration with S. Green).

THE pS2 GENE, mRNA AND PROTEIN: A POTENTIAL MARKER FOR HUMAN BREAST CANCER.

Cancer Cells (1990) 2, 269-274.

(in collaboration with M-C. Rio).

RETINOIC ACID RECEPTORS IN THE EMBRYO.

Seminars in Developmental Biology. (1991) 2, 153-159.

(in collaboration with E. Ruberte, P. Kastner, P. Dollé, A. Krust, P. Leroy, C. Mendelsohn, and A. Zelent).

LE RECEPTEUR DES OESTROGENES : DE SA STRUCTURE A SA FONCTION.

Annales de L'Institut Pasteur/actualités (1992)

Elsevier, Paris (1992) 1, pp 51-61.

MULTIPLICITY GENERATES DIVERSITY IN THE RETINOIC ACID SIGNALLING PATHWAYS

Trends in Biochemical Sciences, (1992) 17, 427-433.

(in collaboration with M. Leid and P. Kastner).

THE ROLE OF NUCLEAR RETINOIC ACID RECEPTORS IN THE REGULATION OF GENE EXPRESSION.

Vitamin A in Health and Disease, ed. R. Blomhoff, Marcel Dekker Inc. (1994) pp.189-238.

(in collaboration with P. Kastner and M. Leid).

STROMELYSIN-3 IN STROMAL TISSUE AS A CONTROL FACTOR IN BREAST CANCER BEHAVIOUR.

In Cancer Supp. (1994) 74, 1045-1049.

(in collaboration with P. Basset, C. Wolf, N. Rouyer, J.P. Bellocq, and M.C. Rio)

THE RETINOID SIGNALING PATHWAY: MOLECULAR AND GENETIC ANALYSES.

In "Seminars in Cell Biology: Nuclear Hormone Receptors". (1994) 5, 115-125.

ALTERATION OF HOX GENE EXPRESSION IN THE BRANCHIAL REGION OF THE HEAD CAUSES HOMEOTIC TRANSFORMATIONS, HINDBRAIN SEGMENTATION DEFECTS AND ATAVISTIC CHANGES.

Seminars in Developmental Biol. (1995) **6**, 275-284.  
(in collaboration with M. Mark, and F.M. Rijli)

ROLES OF RETINOIC ACID RECEPTORS AND OF HOX GENES IN THE PATTERNING OF THE TEETH AND OF THE JAW SKELETON.

Int. J. Dev. Biol. (1995) **39**, 111-121.  
(in collaboration with M. Mark, D. Lohnes, C. Mendelsohn, V. Dupé, J.L. Vonesch, P. Kastner, F. Rijli, and A. Bloch-Zupan)

NONSTEROID NUCLEAR RECEPTORS : WHAT ARE GENETIC STUDIES TELLING US ABOUT THEIR ROLE IN REAL LIFE?

In CELL - reviews (1995) **83**, 859-869.  
(in collaboration with P. Kastner, and M. Mark)

THE NUCLEAR RECEPTOR SUPERFAMILY: THE SECOND DECADE.

In Cell (1995) **83**, 835-839.  
(in collaboration with D.J. Mangelsdorf, C. Thummel, M. Beato, P. Herrlich, G. Schütz, K. Umesono, B. Blumberg, P. Kastner, M. Mark, and R.M. Evans).

A DECADE OF MOLECULAR BIOLOGY OF RETINOIC ACID RECEPTORS.

In The FASEB J. "The Retinoid Revolution". W.J. Whelan, ed. (1996) vol. **10**, 949-954.

SUR LA GENETIQUE MOLECULAIRE.

(integral text of inaugural conference at the Collège de France in June 1994)  
In "Commentaire", Plon ed. (1996), **73**, 5-21.

HOMEODOMAIN GENES IN EMBRYOGENESIS AND PATHOGENESIS:

Pediat. Res. (1997) **42**, 421-429.  
(in collaboration with M. Mark and F. Rijli)

GENETIC INTERACTIONS OF HOX GENES IN LIMB DEVELOPMENT: LEARNING FROM COMPOUND MUTANTS.

In: Curr. Opin. Genet. Develop. (1997) **7**, 481-487.  
(in collaboration with F. Rijli)

RETINOIDS AND MOUSE PLACENTATION.

In: "The Trophoblast Research". A. Carter, V. Dantzer, T. Jansson eds. (1998) **12**, 57-76.  
(in collaboration with V. Sapin, R.J. Bègue\*, B. Dastugue\*, and P. Dollé)

MESECTODERM IS A MAJOR TARGET OF RETINOIC ACID ACTION :

Eur. J. Oral Sci., (1998) **106**, 24-31.  
(in collaboration with M. Mark, N.B. Ghyselinck, P. Kastner, V. Dupé, O. Wendling, W. Krezel and B. Mascres)

SEGMENTATION AND SPECIFICATION IN THE BRANCHIAL REGION OF THE HEAD: THE ROLE OF THE HOX SELECTOR GENE.

Int. J. Dev. Biol., (1998) **42**, 398-401.

(in collaboration with F. Rijli and A. Gavalas)

CONTROL OF TRANSCRIPTION AND NEUROLOGICAL DISEASES.

Mol. Psychiatry (News & Views) (1999) **4**, 112-114.

(in collaboration with E. Borrelli)

A GENETIC DISSECTION OF THE RETINOID SIGNALING PATHWAY IN THE MOUSE.

Proc. Nutr. Soc., (1999) **58**, 609-613.

(in collaboration with M. Mark, N. Ghyselinck, O. Wendling, V. Dupé, B. Mascrez, P. Kastner)

UN RÔLE ESSENTIEL DES RECEPTEURS DE RETINOÏDES AU COURS DU DÉVELOPPEMENT EMBRYONNAIRE PRÉCOCE ET DE LA PLACENTOGÈSE.

Médecine/Sciences (1999) **15**, 885-887.

(in collaboration with O. Wendling and M. Mark)

NUCLEAR RECEPTORS COORDINATE THE ACTIVITIES OF CHROMATIN REMODELING COMPLEXES AND COACTIVATORS TO FACILITATE INITIATION OF TRANSCRIPTION

Oncogene (2001) **20**, 3047-3054.

(in collaboration with J. Dilworth)

F9 EMBRYOCARCINOMA CELLS: A CELL AUTONOMOUS MODEL TO STUDY THE FUNCTIONAL SELECTIVITY OF RARS AND RXRS IN RETINOID SIGNALING.

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